

## EAST Search History

S16	5403	high adj k	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:18
S17	5403	S15 or S16	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:34
S18	1315	S17 and S13	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:34
S19	752611	nitrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:34
S20	709	S18 and S19	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:35
S21	466516	plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:35
S22	532	S20 and S21	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:35
S23	67269	anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:35
S24	225	S22 and S23	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:35
S25	32799	hafnium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:35

## EAST Search History

S26	99	S24 and S25	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:35
S27	424	alcvd	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:35
S28	11	S26 and S27	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:55
S29	99754	torr	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:36
S30	4	S28 and S29	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 07:36
S31	330169	"28" and hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S32	1768435	treatment	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S33	3105	high-k	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S34	5403	high adj k	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S35	5403	S33 or S34	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42

## EAST Search History

S36	1315	S35 and S32	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S37	752611	nitrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S38	709	S36 and S37	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S39	466516	plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S40	532	S38 and S39	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S41	67269	anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S42	225	S40 and S41	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S43	32799	hafnium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S44	99	S42 and S43	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S45	424	alcvd	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42

## EAST Search History

S46	11	S44 and S45	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:42
S47	9	S46 and hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:43
S48	1	S46 and (hydrogen near plasma)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:44
S49	8514	hydrogen near treatment	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:44
S50	1898	S49 and plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 10:45
S51	26	S50 and S35	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:25
S52	24472	plasma near treatment	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:25
S53	905959	hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:26
S54	8529	S52 and S53	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:26
S55	1490	S52 and S53.ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:26

## EAST Search History

S56	1567586	semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:26
S57	775	S55 and S56	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:26
S58	67269	anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:26
S59	74	S57 and S58	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:27
S60	13	S59 and S35	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:27
S61	10	S60 and gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:27
S62	45	(plasma adj treatment) and wang. in. and (TAIWAN adj SEMICONDUCTOR).as.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:31
S63	0	S62 and anneal8 and hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:31
S64	506	S38 and hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:31
S65	14	S62 and anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:31

## EAST Search History

S66	6	S65 and hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:32
S67	0	S65 and (hydrogen near plasma)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:32
S68	0	plasma near treatment and improves and threshold near voltage	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:37
S69	0	improves near threshold near voltage	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:34
S70	307	threshold near voltage	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:35
S71	25	S70 and treatment	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:35
S72	11	S71 and hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:37
S73	905959	hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:37
S74	24472	plasma near treatment	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:37
S75	765	S73 near S74	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:38

## EAST Search History

S76	4	S75 and gate near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 11:59
S77	151	437/937	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:29
S78	0	S77 and S35	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:29
S79	43	S77 and dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:30
S80	30	S79 and gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:31
S81	28	S80 and plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:31
S82	26	S81 and hydrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:42
S83	5164	ALD	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:42
S84	32799	hafnium	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:42
S85	13	S83 near S84	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:43

## EAST Search History

S86	3574918	temperature	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:43
S87	11	S85 and S86	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:43
S88	3	S46 and min	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/09/22 12:55
S89	3	"6803275".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 13:46
S90	5	10/023,548	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 13:56
S91	3927	plasma near treat	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 13:57
S92	6907	gate near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 13:56
S93	0	S91 near S92	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 13:58
S94	26288	plasma near treatment	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 13:58
S95	0	S94 near S92	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 13:57



## EAST Search History

S96	500481	plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 13:58
S97	8	S96 near S92	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 14:21
S98	382	gate near dielectric near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 14:22
S99	325	S98 and high	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 14:22
S10 0	284	S99 and nitride	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 14:22
S10 1	43	S99 and nitrided	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/01 14:22
S10 2	30	S101 and anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 10:36
S10 5	382	gate near dielectric near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 10:36
S10 6	325	S105 and high	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 10:36
S10 7	43	S106 and nitrided	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 10:36

## EAST Search History

S108	30	S107 and anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 10:36
S109	2	S108 and (stacked adj gate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 11:01
S110	4421	stacked adj gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 11:01
S111	6505	high adj k	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 11:01
S112	1	S110 near S111	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 11:26
S113	84	stacked adj gate adj dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 11:32
S114	0	2005/0101147	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 11:32
S115	2	"20050101147"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:32
S116	2	"6136725".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:44
S118	0	anneal near gate near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:45

## EAST Search History

S11 9	0	aneal same gate near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:44
S12 0	0	aneal and (gate adj stack)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:44
S12 1	2	anneal near (stacked near gate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:48
S12 2	109	anneal near (dielectric near layers)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:52
S12 3	225	anneal near dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:52
S12 4	173	anneal adj dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 12:53
S12 5	16	anneal near (gate adj dielectric)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 13:02
S12 6	149	anneal near (gate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 13:05
S12 7	7	anneal near (polysilicon near gate)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 13:12
S12 8	149	gate near anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 13:12

## EAST Search History

S129	39	gate adj anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 13:12
S130	7	S129 and degree	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 13:39
S132	0	polysilicon near electrode near anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 14:55
S133	115	(polysilicon near electrode) same anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 15:10
S134	0	(rapid adj thermal adj anneal) and aparatus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 15:11
S135	1374	(rapid adj thermal adj anneal) and apparatus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 15:11
S136	1	((rapid adj thermal adj anneal) and apparatus).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 15:14
S137	2	((rapid adj thermal adj processor) and apparatus).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 15:14
S138	6	((rapid adj thermal adj processor) and apparatus).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 15:14
S139	21	((rapid adj thermal adj anneal) and apparatus).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:02

## EAST Search History

S14 0	2	"5387557".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 15:21
S14 1	2	"6912433".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 15:35
S14 2	6917	gate near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:08
S14 3	87808	siO2 or ((silicon adj dioxide) near base)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:09
S14 4	331	((silicon adj dioxide) near base)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:09
S14 5	42	S144 and stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:10
S14 6	18	S145 and gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:27
S14 7	65477	((silicon adj dioxide) or (SiO2 or SiOx or SiOn or "SiO.sub2" or "SiO.subx" or "SiO.subn" or "SiO.sub.2" or "SiO.sub.x" or "SiO.sub.n")) and gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:30
S14 8	36602	((silicon adj dioxide) or (SiO2 or SiOx or SiOn or "SiO.sub2" or "SiO.subx" or "SiO.subn" or "SiO.sub.2" or "SiO.sub.x" or "SiO.sub.n")) same gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:30
S14 9	3596	((silicon adj dioxide) or (SiO2 or SiOx or SiOn or "SiO.sub2" or "SiO.subx" or "SiO.subn" or "SiO.sub.2" or "SiO.sub.x" or "SiO.sub.n")) near gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:31

## EAST Search History

S15 0	3011	((silicon adj dioxide) or (SiO2 or SiOx or SiOn or "SiO.sub2" or "SiO.subx" or "SiO.subn" or "SiO.sub.2" or "SiO.sub.x" or "SiO.sub.n")) adj gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:31
S15 1	0	((silicon adj dioxide) or (SiO2 or SiOx or SiOn or "SiO.sub2" or "SiO.subx" or "SiO.subn" or "SiO.sub.2" or "SiO.sub.x" or "SiO.sub.n")) near gate near base	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:31
S15 2	44	((silicon adj dioxide) or (SiO2 or SiOx or SiOn or "SiO.sub2" or "SiO.subx" or "SiO.subn" or "SiO.sub.2" or "SiO.sub.x" or "SiO.sub.n")) same gate near base	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:47
S15 3	3	"6,803,275".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:44
S15 4	2	((silicon adj dioxide) or (SiO2 or SiOx or SiOn or "SiO.sub2" or "SiO.subx" or "SiO.subn" or "SiO.sub.2" or "SiO.sub.x" or "SiO.sub.n")) same ((high adj k) near base)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:48
S15 5	2	((silicon adj dioxide) or (SiO2 or SiOx or SiOn or "SiO.sub2" or "SiO.subx" or "SiO.subn" or "SiO.sub.2" or "SiO.sub.x" or "SiO.sub.n")) near base) same (high adj k)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:51
S15 6	24670	"20030325"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 16:51
S15 7	1	"2002JP-PAT.2002-086774"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:27
S15 8	101	nitrided near dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:28
S15 9	16	nitrided near dielectric.ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:31

## EAST Search History

S16 0	22	plasma near nitride near treatment	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:34
S16 1	2498	high-k near dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:31
S16 2	0	S160 and S161	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:31
S16 3	10	S160 and Torr	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:34
S16 4	752	S161 and minutes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:35
S16 5	10	S163 and Torr	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/03 17:34
S16 6	6	S163 and minutes	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/04 12:58
S17 3	176	(etch near chamber) and ("1" adj Torr)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/04 13:03
S17 4	214462	etch	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/04 13:03
S17 5	4420188	apparatus	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/04 13:03

## EAST Search History

S17 6	4112	S174 and "9".ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/04 13:03
S17 7	10	S176 and (pressure near range)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/04 13:03
S17 8	2639	(S174 and S175).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/04 13:03
S17 9	67	S178 and (pressure near range)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/05/04 13:04
S18 0	0	2005/0101147	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/15 12:21
S18 1	2	"20050101147"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/15 13:53
S18 2	1020	high k gate dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:11
S18 3	816	high-k gate dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:06
S18 4	1020	S182 or S183	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:06
S18 6	1617500	electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:09



## EAST Search History

S18 7	183253	gate electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:07
S18 8	1617500	S186 or S187	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:07
S18 9	1789061	pattern	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:07
S19 0	223264	etch	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:07
S19 1	524986	plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:08
S19 2	73996	anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:09
S19 3	776	S184 and S188	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:10
S19 4	176	S193 and S189 and S190 and S191	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:10
S19 5	115	S194 and S192	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:10
S19 6	26	high k gate dielectric stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:11

## EAST Search History

S19 7	3	S195 and S196	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:49
S19 8	3	"20050095798"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:50
S19 9	0	plasma treatment after forming gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 14:51
S20 0	24	plasma treatment gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 15:45
S20 1	2	"6080529".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	NEAR	ON	2006/09/15 15:45
S20 2	0	2004/0241920	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:07
S20 3	2	"20040241920"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:07
S20 4	0	anneal near "H.sub.2" near plasma near treatment near gate near metal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:10
S20 5	0	anneal with "H.sub.2" near plasma near treatment with gate with metal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:11
S20 6	0	anneal same "H.sub.2" near plasma near treatment with gate with metal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:11

## EAST Search History

S20 7	2	anneal same "H.sub.2" with plasma with treatment same gate same metal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:13
S20 8	3	"5,406,447".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:18
S20 9	0	anneal near gate near "700" near degree	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:19
S21 0	7	anneal near "700" near degree	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:20
S21 1	4	S210 and gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:19
S21 2	2	anneal near "600" near degree	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:20
S21 3	4	anneal near "650" near degree	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:20
S21 4	158	anneal near gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:20
S21 5	0	anneal near gate near degree	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:21
S21 6	10	anneal near gate near temperature	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:22

## EAST Search History

S21 7	5	gate near treatment same anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 10:23
S21 8	5	(gate near treatment) same anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:16
S22 1	13542	Taiwan adj Semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:17
S22 2	1043885	gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:17
S22 3	4798	S221 and S222	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:18
S22 4	651	S223 and anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:18
S22 5	9	S224 and anneal near gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:22
S22 6	8	S225 and electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:53
S22 7	185	degree with (nitrogen or "N.2" or "n.sub.2") with anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:53
S22 8	600	degree same (nitrogen or "N.2" or "n.sub.2") same anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:56

## EAST Search History

S22 9	355	S228 and gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:57
S23 0	246	S229 and electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:56
S23 1	102	S228 same gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:57
S23 2	70	S231 and electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:13
S23 3	24	S232 and stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 11:57
S23 4	35	S231 same electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:13
S23 5	428079	S234 ans stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:14
S23 6	5	S234 and stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:17
S23 7	27	anneal near gate near electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:17
S23 8	246	anneal and gate and electrode and S228	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:18

## EAST Search History

S23 9	27	anneal and gate and electrode and S237	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:39
S24 0	2	(silicon adj dioxide) near gate near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:44
S24 1	2002775	"5,972,804" or "6,140,187" or "5,962,904" or "6,096,640" or "6,204,125" B1	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:45
S24 2	0	"5,972,804.pn." or "6,140,187.pn." or "5,962,904.pn." or "6,096,640.pn." or "6,204,125.pn."	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:45
S24 3	10	"5,972,804".pn. or "6,140,187".pn. or "5,962,904".pn. or "6,096,640".pn. or "6,204,125".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:47
S24 4	491498	S243 and silicon dioxide	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:47
S24 5	4	S243 and silicon adj dioxide	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:49
S24 6	1	gete adj dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:49
S24 7	21708	gate adj dielectric	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:50
S24 8	202	gate adj dielectric adj stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:50

## EAST Search History

S24 9	6	S248 near high adj k	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:51
S25 0	2	"6743681".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:53
S25 1	337	(tantalum and hafnium and titanium and yttrium and lanthanum and zirconium) adj oxide	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:55
S25 2	22148	S251 smae (gate adj dielectric)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 12:55
S25 3	189	S251 and (gate adj dielectric)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:24
S25 4	30	S253 and gate adj stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 14:58
S25 5	2	"6596599".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 15:40
S25 6	2	"6797576".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 15:40
S25 7	24	2002/0115252	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 16:56
S25 8	2	"20020115252".	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/09/18 16:56

## EAST Search History

S259	20	"6596599"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:13
S260	2	"6596599".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:14
S261	12754	gate and ((high-k or (high adj k) or high adj dielectric adj constant))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:26
S263	1085720	interference or leakage	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:27
S264	866	between near dielectric near electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:36
S265	0	S263 near S264	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:28
S266	11	S263 same S264	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:35
S267	2586	gate same nitrogen same treatment	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:36
S268	0	S267 and aneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:36
S269	449	S267 and anneal	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:36



## EAST Search History

S27 0	16275	dielectric near electrode	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 10:37
S27 1	23	S269 and S270	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 11:00
S27 2	3602	lithography same pattern same etch	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 11:00
S27 3	575	S272 same gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 11:01
S27 4	547	S273 and semiconductor	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 11:01
S27 5	166	S273 and gate adj structure	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 12:20
S27 6	0	sputtering near use near nitrogen	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 12:20
S27 7	4	sputter near nitrogen near plasma	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 12:23
S27 8	153	sputter same (nitrogen near plasma)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 12:47
S27 9	2	"6,797,576".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 12:56

## EAST Search History

S28 0	9	high-k adj stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 12:57
S28 1	62	high-k near stack	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 13:00
S28 2	42983	stack.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 12:58
S28 3	12	S281 and S282	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 12:58
S28 4	12	high-k near stack near gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 13:00
S28 5	3	S284 and S283	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 13:23
S28 6	87	plasma same anneal same treatment same gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 13:25
S28 7	5	(plasma near anneal) same treatment same gate	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 14:12
S28 8	1	2005/0074983	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 14:21
S28 9	2	"20050074983"	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 14:44

## EAST Search History

S29 0	2	"5,075,641".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 14:45
S29 1	161	sputter same ("1" adj mtorr)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 14:46
S29 2	225	sputter same ("100" adj mtorr)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/03/03 14:46